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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,154	11/05/2003	Alistair D. Conkie	1999-0394Con	7307

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AT&T CORP.  
P.O. BOX 4110  
MIDDLETOWN, NJ 07748

EXAMINER
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AZAD, ABUL K

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/702,154	<b>Applicant(s)</b> CONKIE, ALISTAIR D.	
	<b>Examiner</b> ABUL K. AZAD	<b>Art Unit</b> 2654	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,11,13 and 14 is/are rejected.
- 7) ☒ Claim(s) 2,4,7-10,12 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/15/05</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is in response to the communication filed on November 25, 2005.
2. Claims 1-15 are pending in this action.
3. The applicant's arguments with respect to claims 1-15 have been fully considered but they are not deemed to be persuasive. For examiner's response to the applicant's arguments or comments, see the detailed discussion in the Response to the Arguments section.
4. The applicant has filed a Terminal Disclaimer to overcome the Double patenting rejection set forth in the previous rejection.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3, 5, 6, 11, 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Acero et al. (US 6,163,769).

As per claim 1, Acero teaches, “a triphone preselection cost database for use in speech synthesis”, the database generated according to a method comprising:

“selecting a triphone sequence” (col. 5, lines 1-24, reads on “the recorded speech is stored in any one of the suitable memory device . . . wide range of different phonetic samples that illustrate phonemes in various contexts”);

“calculating a preselection cost for each 5-phone sequence  $u_a-u_1-u_2-u_3-u_b$ , where  $u_2$  is allowed to match any identically labeled phoneme in a database and the units  $u_a$  and  $u_b$  vary over the entire phoneme universe” (col. 5, lines 38-54); and

“storing a group of the selected triphone sequences exhibiting the lowest costs in a triphone preselection cost database” (col. 5, line 55 to col. 6, line 15).

As per claim 3, Acero teaches, “the method for generating the database further comprising generating a key to index each triphone in the database” (col. 5, lines 55-67).

As per claim 5, Acero teaches, “wherein the preselection cost is the target cost or an element to the target cost” (col. 7, lines 45-60).

As per claims 6, 11, 13 and 15, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1, 3 and 5.

#### ***Allowable Subject Matter***

7. Claims 2, 4, 7-10, 12 and 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

***Response to Arguments***

8. The applicant argues, that Acero et al. do not teach the step of selecting a triphone sequence.

The examiner disagrees with the applicant's above assertion because the limitation can particularly reads on "triphones (a phoneme with its one immediately preceding and succeeding phonemes as the context) are used for context-dependent phoneme-based units; where for each unique triphone in the unlabeled corpus, a correspondent HMM will be generated in module and stored in the HMM database" (Col. 5, lines 40-45).

9. The applicant further argues, "Now, while this references a phoneme string of five phonemes - it does not teach anything regarding calculating a preselection cost for each 5-phoneme sequence  $u_a - u_1 - u_2 - u_3 - u_b$  where  $u_2$  is allowed to match any identically labeled phoneme in a database and the units  $u_a$  and  $u_b$  vary over the entire phoneme universe. The only reference in Acero et al. is to the possibility of modeling a quinphone if training data is available. Accordingly, this limitation is not taught or suggested by Acero et al".

The examiner disagrees with applicant's above assertion because this limitation can be reads for the quinphone as mentioned by applicant. Details of this modeling is given by U.S. Pat No. 5,794,197, which is incorporated by references by applicant (col. 7, lines 8-21) See figures 4 and 5.

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(571) 272-7599**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(571) 272-7602**.

Any response to this action should be mailed to:

**Commissioner for Patents**

**P.O. Box 1450**

**Alexandria, VA 22313-1450**

Or faxed to: **(571) 273-8300**.

Hand-delivered responses should be brought to **401 Dulany Street, Alexandria, VA-22314** (Customer Service Window).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 4, 2006

A handwritten signature in black ink, appearing to read 'A.K. Azad', with a stylized flourish at the end.

Abul K. Azad  
Primary Examiner  
Art Unit 2654